

Inguinal Hernia

Quality of life following Shouldice Repair: a prospective cohort study among inguinal hernia patients

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Introduction Quality of life has become an important outcome after hernia surgery [1-3]. This study evaluated quality of life in primary inguinal hernia Shouldice Repair patients from the Shouldice Hospital (SH).

Material & Methods After ethical approval and consent, data was collected. The EQ-5D-3L questionnaire was used to determine quality of life at the preoperative and 1-week, 1- and 6-month postoperative time.

Results From January 2023 to February 2024, 532 participants met the criteria, completed the preoperative survey, and underwent surgery. The participants were mostly male (94%), aged 62.18 years with a BMI of 24.93 kg/m2. The EQ-5D-3L health index scores and EQ-VAS health status significantly changed over time (**Figure 1** and **2**).

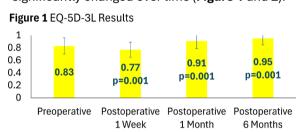


Figure 2 EQ-VAS Results

100
80
79.5
75.24
p<0.001

83.56
85.25
p=0.001
p<0.001

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Discussion Results were compared to a matched cohort study on elective groin hernia repair in Canadian (Vancouver (VCH)) and British (England (NHS)) populations [4]. The SH

reported better findings for pain/discomfort, usual activities, mobility, and anxiety/depression after hernia surgery compared to those presented in Sutherland *et al.* [4]. Possible explanations for improved postoperative results that may be unique to the Shouldice Hospital include in-depth and ongoing patient education, the roommate system, longer postoperative hospital stay, social supports, medical supervision, multimodal pain management, and hernia repair type [5,6] Detailed comparative findings are shown in **Table 1**.

Table 1 Results of a 2023-2024 Shouldice Hospital EQ5D3L with 2013-2017 Vancouver Coastal Health Authority and 2015/2016 National Health Services in England

	SH Preop (n=532)	VCH Preop (n=280)	NHS Preop (n=20,059)	SH 1 Month Postop (n=350)	SH 6 Months Postop (n=189)	VCH 6 Months Postop (n=280)	NHS 3 Months Postop (n=20,059)
Mobility							
No	415(78.0)	208(74.3)	16,348(81.5)	325(92.9)	178(94.2)	235(83.9)	16,542(82.5)
Some	117(22.0)	72(25.7)	3,694(18.4)	25(7.1)	11(5.8)	45(16.1)	3,472(17.3)
Extreme	0(0)	0(0)	17(0.1)	0(0)	0(0)	0(0)	45(0.2)
Self Care							
No	521(97.9)	259(92.5)	19,334(96.4)	342(98.3)	188(99.5)	263(93.9)	19,055(95.0)
Some	10(1.9)	21(7.5)	691(3.4)	5(1.4)	1(0.5)	16(5.7)	943(4.7)
Extreme	1(0.2)	0(0)	34(0.1)	1(0.3)	0(0)	1(0.4)	61(0.3)
Usual Activities							
No	317(59.6)	173(61.8)	14,698(73.3)	267(77.0)	177(93.7)	225(80.4)	15,980(79.7)
Some	208(39.1)	95(33.9)	4,932(24.6)	79(22.8)	12(6.3)	48(17.1)	3,829(19.1)
Extreme	7(1.3)	12(4.3)	429(2.1)	1(0.3)	0(0)	7(2.5)	250(1.2)
Pain/Discomfort							
No	181(34.0)	108(38.6)	6,363(31.7)	212(61.3)	152(80.5)	190(67.9)	13,482(67.2)
Some	343(64.5)	160(57.1)	12,789(63.8)	133(38.4)	36(19.0)	82(29.3)	6,216(31.0)
Extreme	8(1.5)	12(4.3)	907(4.5)	1(0.3)	1(0.5)	8(2.9)	361(1.8)
Anxiety/Depression							
No	418(78.6)	191(68.2)	17,114(85.3)	317(91.6)	176(93.2)	226(80.7)	17,522(87.4)
Some	109(20.5)	82(29.3)	2,767(13.8)	27(7.8)	12(6.3)	45(16.1)	2,351(11.7)
Extreme	5(0.9)	7(2.5)	178(0.9)	2(0.6)	1(0.5)	9(3.2)	186(0.9)

Notes: No/some/extreme-problems. Preop=preoperative, postop=postoperative. Numbers in brackets are (%).

Conclusions Quality of life, as measured by the ED-5D-3L health index score, significantly improved for patients that underwent a Shouldice Repair for an inguinal hernia.

